



Add the following new claims.

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50. (New) An isolated and purified peptide having an amino acid sequence substantially homologous to an amino acid sequence of a domain of a pyrogenic exotoxin and derivatives of said peptide, which domain is not involved in binding of the exotoxin to T lymphocytes or MHC Class II molecules and forms a central turn in the exotoxin starting within β -strand 7 and connecting it, via short β -strand 8, to α -helix 4, wherein said isolated peptide is capable of eliciting protective immunity against toxic shock induced by said pyrogenic exotoxin and/or capable of antagonizing toxin-mediated activation of T lymphocytes.

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51. (New) The isolated and purified peptide of Claim 50 wherein said peptide has an amino acid sequence substantially homologous to the amino acid sequence of amino acids 150-161 of Staphylococcus aureus enterotoxin B (SEQ. ID NO.: 12) and derivatives of said peptide, wherein said isolated peptide is capable of eliciting protective immunity against toxic shock induced by at least one pyrogenic exotoxin and/or capable of antagonizing toxin-mediated activation of T lymphocytes.

52. (New) The peptide of Claim 50 or 51, wherein said peptide is dimerized.

53. (New) The peptide of Claim 50 or 51, wherein said peptide is multimerized.

54. (New) The peptide of Claim 53, wherein said peptide is trimerized.

55. (New) The peptide of Claim 50 or 51, wherein said peptide is

conformationally constrained.

56. (New) The peptide of Claim 55, wherein said peptide is cyclized.

57. (New) The peptide of Claim 50 or 51 further comprising an N-terminal lauryl-cysteine (LC) and/or a C-terminal cysteine.

58. (New) The peptide of Claim 50 or 51 further comprising an N-terminal and C-terminal cysteine.

59. (New) The peptide of Claim 58 wherein the peptide comprises an intramolecular disulfide bridge.

60. (New) The peptide of Claim 50 or 51, further comprising an N-terminal and a C-terminal D-amino acid residue.

61. (New) The peptide of Claim 60, wherein the D-amino acid is D-alanine.

62. (New) The peptide of Claim 50 or 51, comprising an N-terminal acetyl group.

63. (New) The peptide of Claim 62, further comprising a C-terminal D-amino acid residue.

64. (New) The peptide of Claim 63, wherein the D-amino acid is D-alanine.

65. (New) An isolated peptide having the amino acid sequence of SEQ.

ID NO.: 1 and derivatives thereof.

66. (New) An isolated peptide having the amino acid sequence of SEQ.

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ID NO.: 2 and derivatives thereof.

67. (New) An isolated peptide having the amino acid sequence of SEQ.

ID NO.: 3 and derivatives thereof.

68. (New) An isolated peptide having the amino acid sequence of SEQ.

ID NO.: 4 and derivatives thereof.

69. (New) An isolated peptide having the amino acid sequence of SEQ.

ID NO.: 5 and derivatives thereof.

70. (New) An isolated peptide having the amino acid sequence of SEQ.

ID NO.: 6 and derivatives thereof.

71. (New) An isolated peptide having the amino acid sequence of SEQ.

ID NO.: 7 and derivatives thereof.

72. (New) An isolated peptide having the amino acid sequence of SEQ.

ID NO.: 8 and derivatives thereof.

73. (New) An isolated peptide having the amino acid sequence of SEQ.

ID NO.: 9 and derivatives thereof.

74. (New) An isolated peptide having the amino acid sequence of SEQ.

ID NO.: 10 and derivatives thereof.

75. (New) An isolated peptide having the amino acid sequence of SEQ.

ID NO.: 11 and derivatives thereof.

76. (New) A composition which inhibits pyrogenic exotoxin-mediated activation of T-lymphocytes comprising an isolated peptide according to Claim 50 or 51,

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in an amount effective to inhibit exotoxin-induced expression of an RNA encoded by the IL-2, INF- γ and/or TNF- β genes, and a carrier.

77. (New) The composition of Claim 76, wherein the peptide has a sequence selected from the group consisting of SEQ. ID NO.: 1, SEQ. ID NO.: 2, SEQ. ID NO.: 3, SEQ. ID NO.: 4, SEQ. ID NO.: 5, SEQ. ID NO.: 6, SEQ. ID NO.: 7, SEQ. ID NO.: 8, SEQ. ID NO.: 9, SEQ. ID NO.: 10, and SEQ. ID NO.: 11.

78. (New) The composition of Claim 76, wherein the peptide has a sequence selected from the group consisting of SEQ. ID NO.: 2, SEQ. ID NO.: 6, SEQ. ID NO.: 7, SEQ. ID NO.: 8, SEQ. ID NO.: 9, SEQ. ID NO.: 10 and SEQ. ID NO.: 11.

79. (New) The composition of Claim 76, wherein the peptide has the sequence of SEQ. ID NO.: 2.

80. (New) An immunogenic composition for eliciting an antibody that blocks pyrogenic exotoxin mediated activation of T-lymphocytes comprising an isolated peptide according to Claim 50 or 51, in an amount effective to induce an antibody that binds to a pyrogenic exotoxin, and a carrier.

81. (New) The immunogenic composition of Claim 80, further comprising an adjuvant selected from the group consisting of proteosomes, KLH, alum and mixtures thereof.

82. (New) The immunogenic composition of Claim 80, wherein the peptide has a sequence selected from the group consisting of SEQ. ID NO.: 1, SEQ. ID NO.: 2, SEQ. ID NO.: 3, SEQ. ID NO.: 4, SEQ. ID NO.: 5, SEQ. ID NO.: 6, SEQ. ID

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NO.: 7, SEQ. ID NO.: 8, SEQ. ID NO.: 9, SEQ. ID NO.: 10 and SEQ. ID NO.: 11.

83. (New) The immunogenic composition of Claim 80, wherein the peptide has a sequence selected from the group consisting of SEQ. ID NO.: 2, SEQ. ID NO.: 6, SEQ. ID NO.: 7, SEQ. ID NO.: 8, SEQ. ID NO.: 9, SEQ. ID NO.: 10 and SEQ. ID NO.: 11.

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